*Students will apply critical thinking and scientific methods of thinking (including logical and empirical reasoning) to issues regarding children’s well-being.*

I think that there are multiples ways to reflect on the above statement. Applying critical thinking and scientific methods to issues regarding children’s well being is not only (in my opinion) utilizing empirical reasoning, but also remaining the most ethical. By adopting critical thinking and scientific reasoning as a standard way of thought, issues regarding children would be well thought out with the child’s best interests in mind.

 When taking responsibility for a child, to promote an explorative and open mind, it has to be taught that things are done for specific reasons. We, as professionals of other adult’s children, cannot teach our reasons for why we can or cannot do something, because our reasons may not be the reasoning the parent uses, causing discord and ethical dilemmas of teaching someone else’s child the wrong thing.

 However, by continually using empirical reasoning to assess a situation to fix it, there is no ethical dilemma. Also, it provides a standard basis of reasoning for all people and professionals to adhere to. Objective reasoning is solid. In the cases of issues of children’s well being, care takers must be solid in their ideals and teachings because they have to be accountable to the child’s parents, who have the ultimate authority to their child’s well being. Professionals could get in a lot of trouble for mishandling a situation with someone else’s child.

 I have come to the conclusion of using empirical reasoning for most aspects of my life because it is what I have seen to be the most constructive, effective, and productive. I struggle sometimes though because even though I am logical, there are a lot of people who aren’t and sometimes I cannot understand thought processes of people, and then I begin to question their intelligence until they realize that perhaps my way of thinking was correct and less destructive; we should probably just listen to me in the first place. When I have that thought process, I think it is very arrogant and uncompassionate. It makes me seem mean, or judgmental against others, when in actuality I can’t understand them. I have learned though to be more understanding and to keep my opinions to myself until asked for. I have gotten to be a much more effective communicator that way.

 As a member of the child development, I can offer an open, honest, ethical, and logical approach to a child’s well being. Parents would not have to worry about me taking care of their child because they know it would be in good hands and that I think first, act later.

 I learned a lot about objective thinking from my literature review for my research paper in my professional research class. We learned how to take information, sort objective vs subjective research, and produce our own knowledge out of it. That class educated me on exactly what counted as empirical research, sources, and how to maintain an ethical professional career.

 In the same class, I had to critique my classmate’s work, in a peer editing fashion. I could not mark them down because I thought they were a bad writer or because I thought there was a better way to word a sentence. I had to follow a rubric of editing to provide the writer with clear, succinct, and standard approved ratings that they could understand with little bias.

**Junior Research Paper**

Divorce and Its Effect on Children’s Memory Skills

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Divorce and Its Effect on Children’s Memory

Divorce is a stressful and challenging situation for children to experience. Children are faced with years of adjustment and forced to cope with tremendous change (Foulkes-Jamison, 2001). As time goes on, the stresses and challenges of living with divorced parents continue. There have been numerous studies that provide evidence showing that divorce effects cognitive development, but little has been researched about how long after divorce children’s cognitive abilities are effected, specifically memory skills. This purpose of this study is to investigate whether the length of time since divorce effects children’s memory skills.

Foulkes-Jamison (2001) expressed that divorce causes children multiple stressors that they must adjust to. These include new family dynamics, decreased contact with one parent, a decreased standard of living, and changing of home or schools. Adjustment could take years, even following the children into adulthood. The effects of divorce on children are shown through fear, coping with change, decreased learning in school, etc. (Foulkes-Jamison, 2001). One of the effects of divorce in children’s lives come out through academic achievement.

Potter (2010) researched the effects of divorce on children’s psychosocial well-being and academic achievement. The study included 10,061 children with four years, or “waves,” of children’s educational data; which included Kindergarten, 1st grade, 3rd grade, and 5th grade. Academic achievement and psychosocial well-being was measured by math and reading assessments, psychosocial measures, family economic resources, and parenting practices at each wave. The results showed that divorced children have lower academic achievement for math and reading than non divorced children. Lower academic achievement was influenced by divorce through the subsequent altering of the child’s psychosocial well-being. This suggests implied that divorce has a more complex effect on children than researchers once thought.

Researchers have been studying the effects of divorce on children throughout the years. Amato and Keith (2005) provided a meta-analysis of 93 studies published between 1960-1980 and concluded that children from divorced parents are less well off than children from non divorced parents in measures of academic achievement, psychosocial well-being, self esteem, and peer relations (Amato, 2005). In the late 1990s, Amato compiled another meta-analysis of 67 studies and found that even in an era when divorce was more common, children from divorced families continued to score significantly lower on measures of academic achievement, psychosocial well-being, self esteem, and peer relations than their non divorced peers (2005).

Most researchers have come to the similar conclusion that stress is one of the effects of divorce and Joseph, Mynard, and Mayall (2000), did a study that asked over 400 early adolescents about upsetting life events that they have witnessed or experienced. Events such as life threatening situations or attacks had a high prevalence of posttraumatic stress in the participants; and it was found that participants who had experienced parental separation or divorce also had high levels of posttraumatic stress (Joseph, et. al., 2000). Other researchers have examined how high levels of stress effect the brain and memory in children.

A study done by Hanson, Chung, Avants, Rudolph, Shirtcliff, Gee, Davidson and Pollak (2012) showed evidence that stress in children impairs their spatial working memory process. Hanson, et. al., conducted a study using structural MRI scans of the prefrontal cortex (PFC) of 61 children to determine whether cumulative life stress has an effect on the PFC. The participants completed a stress-level interview and then participated in the MRI scan. The results showed structural variations of the PFC for those children who had higher scores of cumulative life stress. Structural variations of the PFC indicated poorer spatial working memory and impaired cognitive function (Hanson, et al., 2012).

Other studies found that stress hormones alter cell birth and death in the hippocampus (which stores memories in the brain). This is especially prevelant during immaturity (children) and vulnerable periods (Nelson & Carver, 1998, as cited in Howe, Goodman, & Cicchetti, 2008). Stress hormones effect the retrieval and encoding process in the hippocampus; the developing nervous system and vulnerable hippocampus of the child is easily influenced and changed by stress. Additionally it was found that impaired memory performance is affected more by chronic stress rather than acute stress (Jelicic & Bonke, 2001, as cited in Howe, et. al., 2008).

The purpose of this study is to examine the length of time since the divorce and children’s memory skills. Studies have shown that stress is an effect of divorce and stress impairs the memory process of children. However other studies have not shown whether the length of time since divorce has an effect on children’s memory. The hypothesis of this study is that there is a negative relationship between the length of time since the divorce and school aged children’s memory skills. Furthermore, as time increases, memory skills decrease.

References

Amato, P. R. (2005). The impact of family formation change on the cognitive social and emotional well-being of the next generation. *Marriage and Child Wellbeing*, *15*(2). Retrieved November 9, 2013, from http://futureofchildren.org/publications/journals/article/index.xml?journalid=37&articleid=107&sectionid=691

Foulkes-Jamison, L. (2001January 1). Effects of divorce on children. *Effects of Divorce on Children - Clinical Psychology Associates of North Central Florida*. Retrieved November 9, 2013, from http://cpancf.com/articles\_files/efffectsdivorceonchildren.asp,

Hanson, J. L., Chung, M. K., Avants, B. B., Rudolph, K. D., Shirtcliff, E. A., Gee, J. C. (2012). Structural variations in prefrontal cortex mediate the relationship between early childhood stress and spatial working memory. *Journal of Neuroscience*, *32*(23), 7917-7925.

Howe, M. L., Goodman, G. S., & Cicchetti, D. (2008). Trajectories of neurobehavioral development: The clinical neuroscience of child abuse. *Stress, trauma, and children's memory development: neurobiological, cognitive, clinical, and legal perspectives* (pp. 60-63). Oxford: Oxford University Press.

Jelicic, M., & Bonke, B. (2001). Memory impairments following chronic stress? A critical review. *European Journal of Psychiatry, 15(*4), 225-232

Joseph, S., Mynard, H., & Mayall, M. (2000). Life-events and post-traumatic stress in a sample of English adolescents. *Journal of Community & Applied Social Psychology*, *10*(6), 475-482.

Nelson, C. A., & Carver, L. J. (1998). The effects of stress and trauma on brain and memory: A view from developmental cognitive neuroscience. *Development and Psychopathology* (pp. 793-809).

Potter, D. (2010). Psychosocial well-being and the relationship between divorce and children's academic achievement. *Journal Of Marriage And Family*, *72*(4), 933-946.